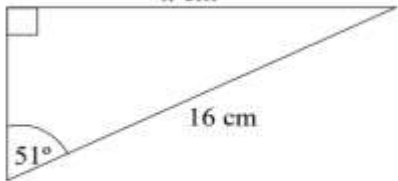
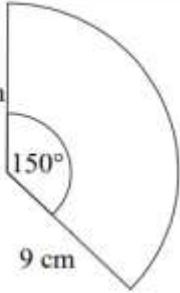


Year 10 Higher

<p>1 A sprinter runs a distance of 400 metres in 44 seconds.</p> <p>Work out the average speed of the sprinter.</p> <p>Give your answer to 1 decimal place.</p>	<p>2 A liquid has a density of 1.2 grams per ml.</p> <p>Find the mass of 250 ml of the liquid.</p>
<p>3 In a class the ratio of boys to girls is 4:3</p> <p>30% of the boys are left handed.</p> <p>What fraction of all the people in the class are left handed boys?</p>	<p>4</p>  <p>Work out the value of x.</p>
<p>5 Write 0.07 in standard form.</p>	<p>6</p> <p>Calculate the area of the sector.</p> <p>Give your answer correct to 3 significant figures.</p> 
<p>7</p> <p>Alex has some marbles.</p> <p>Billie has three times as many marbles as Alex.</p> <p>Chris has 9 fewer marbles than Billie.</p> <p>In total they have 68 marbles.</p> <p>How many marbles does Alex have?</p>	<p>8</p> <p>Dave is making cookies.</p> <p>He mixes flour, butter and sugar in the ratio 4 : 3 : 1</p> <p>Dave uses 195 grams of butter.</p> <p>Work out how much flour and sugar Dave uses.</p>
<p>9</p> <p>Simplify $6m^4n^2 \times 3m^2n$</p>	<p>10 It takes 3 painters 8 days to paint a building.</p> <p>Work out how many days it would take 2 painters to paint the same building.</p>